

REMARKS

In view of the preceding amendments and the comments which follow, and pursuant to 37 CFR §1.111, amendment and reconsideration of the Official Action of December 7, 2005 is respectfully requested by Applicants.

Claims 1-3 and 5-12 have been amended, claims 13-17 are new, and claim 4 has been cancelled. Support for the amendments to claim 1 can be found in the specification, in particular in Fig. 1, reference numeral 9, and on page 9, lines 23-25 and 30-32. Support is also found in original claim 4, now cancelled. Support for the “not greater than 3 mm” recitation in claim 1 comes from the specification on page 10, line 26, where the thickness of the fixing ring annular wall (d) is “at most 1.5 mm”. (Thus as shown in Fig. 2, the diameter of the fixing ring would be the diameter of the sample chamber plus 1.5 mm plus 1.5 mm, or 3 mm.) Support for new claim 13 can be found on page 11, lines 5-6. Support for new claim 14 can be found on page 8, lines 34-35 and page 12, lines 1-4. Support for new claim 15 can be found on page 10, lines 29-32. Support for new claim 16 is found on page 6, line 30. Support for new claim 17 is found in claim 1 and claim 13. No new matter has been added.

Claims 1-3 and 5-17 are currently pending for examination.

Oath/declaration

The examiner states that the oath or declaration is defective because it does not identify the citizenship of each inventor.

Applicants submit concurrently herewith new oaths executed by the inventors and identifying the citizenship of each inventor. The examiner’s consideration of these documents is appreciated.

Rejection under 35 USC §102 (b)

Claims 1-3 and 6-12 have been rejected under 35 USC §102 (b) as being anticipated by Manns, U.S. Patent No. 5,047,215 (hereinafter “Manns”). The examiner argues that with regard to claim 1, Manns teaches a multi-well tray having a plurality of chambers in side-by-side arrangement, with circumferential walls, membrane fixed at the periphery of each well by clamping between the front face of the chamber wall and fixing parts, with grooves and ridges. The examiner further argues that “microdialyser” in the preamble has no particular patentable weight other than being the intended use; the multi-well plate of the reference is capable of such use. Further, the examiner asserts that the reference teaches a semipermeable membrane, and he notes that the molecular weight cut-off of the membrane is not positively recited.

Applicants have amended their claims to clarify that each sample chamber exchange opening is covered by a separate and distinct semipermeable membrane. See, e.g., Applicants' Fig. 1, reference numeral 9, and the specification which teaches semipermeable membranes (plural) fixed to the walls of the sample chambers (page 9, lines 22-25). Further, the limitation of original claim 4, not currently rejected under 102(b), is now recited by amended claim 1. Manns only discloses a single filter sheet that simultaneously covers the opening of multiple sample chambers. Furthermore, the claims specify that each semipermeable membrane is clamped between the front face of the chamber wall and a fixing ring. The Manns device teaches clamping a filter sheet between "a pair of mating plates" and then attaching the mating plates to a front face of the chamber wall. This embodiment does not allow each of the individual sample chambers to be contacted with only one of a plurality of dialysate chambers (as required by claim 3). Thus, Applicants argue that the Manns reference fails to anticipate the present invention as defined by claims 1-3, 6-12, and new claims 13-17. Further, they argue that there is no teaching or suggestion that would modify the Manns reference to prepare a device comprising Applicants' novel combination of elements.

The examiner's reconsideration of the rejection is respectfully requested.

Rejection under 35 USC §103 (a)

Claims 1-12 have been rejected under 35 USC §103 (a) as being unpatentable over Schels et al., U.S. Patent No. 6,670,173 (hereinafter "Schels") in view of Manns. The examiner states that the teaching of the Schels reference differs from the instant claims in the plurality of the sample chambers, common dialysate chamber, dimensions such as wall thickness, membrane area, spacing of the sample chambers, and the number of sample chambers in the device. The examiner argues that all of these are taught by the Manns reference as described in paragraph 1 of the instant office action. It is the examiner's position that therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to use the teaching of Manns in the teaching of Schels for having a multiwell device for simultaneously handling multiple samples as taught by Manns for bioreactions as taught by Schels. Such multiwell plates are also well known in the art as taught by Manns.

Applicants traverse and argue that the examiner's case for *prima facie* obviousness has not been made. The single dialysis chamber taught by Schels is not compatible with a multi-well format because of, among other reasons, the size (diameter) of the sample chamber. The size of the fixing element of Schels has been greatly enlarged to encompass fixing pins (36) in the chamber wall. The claims of Applicants' invention specify that the diameter of the region where the fixing ring engages the sample

chamber does not exceed the diameter of the sample chamber by more than 3 mm. The thickness of Applicants' fixing ring annular wall (d) is thus at the most 1.5 mm. If the surface area of the exchange opening ranges from about 20 mm to about 50 mm (claims 2 and 16), then the radius of each sample chamber is about 2.5 mm to about 4 mm, and if the distance between the center of each sample chamber is about 9 mm (claim 12), then the space between the wells is about 1-4 mm. Accordingly, in a multi-well format, there is simply not room for the structures placed in the sample chamber wall as shown in Fig. 5 of the Schels patent. The gap between neighboring sample chambers in a multiwell dialyzer is only 1-4 mm, and this gap must accommodate $2 \times (d)$. The design disclosed in Schels simply cannot be incorporated into the multi-well format of the Manns reference because the structures associated with fixing the membrane to the sample chamber extend too far beyond the sample chamber wall.

It is further noted that neither Schels nor Mann teach or suggest a fixing part comprising an annular wall extending from the perimeter of a ring-shaped portion, the diameter of the annular wall allowing frictional engagement of the annular wall with the circumferential side wall of the sample chamber.

Lastly, Applicants note that neither Schels nor Manns teach or suggest forming the bottom of the fixing ring so that the inner wall angles outwards from the exchange surface to enhance dialysate contact with the semipermeable membrane (claims 13 and 17).

The teachings of the Schels reference cannot be properly combined with the Manns reference without destroying the features of the Schels device. Further, the Schels and Manns references combined do not teach all the features as recited by the instant claims. For these reasons, Applicants argue that the examiner's case for *prima facie* obviousness has not been made, and they respectfully request the examiner's reconsideration of the rejection.

Applicants submit that their application is now in condition for allowance, and favorable reconsideration of their application in light of the above amendments and remarks is respectfully requested. Allowance of claims 1-3 and 5-17 at an early date is earnestly solicited.

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The examiner is hereby authorized to charge any fees associated with this Amendment to Deposit Account No. 02-2958. A duplicate copy of this sheet is enclosed.

Respectfully submitted,



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